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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,139	03/06/2002	William D. Tandy	4333.1US (99-0257.1)	9714
24247	7590	05/18/2004	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			CHANG, VICTOR S	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,139

Applicant(s)

TANDY ET AL.

Examiner

Victor S Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. The Examiner has carefully considered Applicants' amendments and remarks filed on 4/8/2004. Applicants' amendments to claims 1-24 have all been entered. However, in response to Applicants' repeated statements (Remarks, page 9; and Remarks filed 11/21/2003, page 8) that a copy of PTO-1449 filed 7/17/2002 is attached to the amendments, the Examiner repeats (see Paper No. 123103, page 2) that there is no record of aforementioned PTO-1449, and Applicants also fail to attach a copy of the missing PTO-1449 in both of their amendments filed 3/11/2004 and 4/8/2004. As such, the Examiner again requests Applicants to submit a copy of the missing PTO-1449, along with a copy of the certificate of mailing, in their next communication, so as a complete record of the Information Disclosure Statements can be entered properly.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn.

Drawings

4. It is noted that newly corrected Fig. 5 is the same as the original Fig. 5 filed 3/6/2002. Additionally, the Examiner repeats (see Paper No. 023304, page 2) that the element 2B described in paragraph [0049] is still absent from any of the drawings. Corrected drawing is required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Objections

5. Claims 2, 10 and 18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

More particularly, in claims 2, 10 and 18, all the elements are either expressly or inherently recited in independent claims 1 and 9, respectively, and failing to further limit the subject matter of claims 1, 9 and 17.

Claim Rejections - 35 USC § 112

6. Claims 1-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

More particularly, in newly amended claims 1, 9 and 17, the newly added recitations "the second adhesive layer ... performs at least one of curing onto ... and losing adhesive properties for facilitating peeling of the flexible film" appear to be "new matter", because Applicants fail to point any express or inherent support in the specification. Additionally, the Examiner notes that while it is noted that in specification paragraph [0050], Applicants teach that "The second adhesive layer may also be

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formed to be electromagnetic radiation-curable and adhere to the first mixture layer and carrier tape 4 in an uncured state. Upon exposure to radiation, the second adhesive layer can either cure onto the first mixture layer or, alternatively, lose its adhesive properties and facilitate peeling of carrier tape 4", the scope of the instantly claimed invention is clearly not commensurate with the disclosure in the specification.

Appropriate correction or express support is required.

7. Claims 5, 13 and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

More particularly, in claims 5, 13 and 21, at the last two lines of each claim, the recitation "the second bond strength (or level of adhesiveness) being lower than the first bond strength (or level of adhesiveness)" appears to be not enabling, because the second bond strength (or level of adhesiveness) of each claim, in the depending claims 4, 12 and 20, is recited as being cured and "permanently attached" to the bare semiconductor die surface, i.e., either the adhesive or the substrate must be destroyed before their separation. As such, the Examiner notes that clearly the recitations in claims 5, 13 and 21 stating that the permanently attached second bond having strength (or level of adhesiveness) being lower than the first bond strength (or level of adhesiveness) are not enabling, because the subject matter was not described in the

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specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

8. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More particularly, in newly amended claims 1, 9 and 17, the newly added recitations "the second adhesive layer ... performs at least one of curing onto ... and losing adhesive properties for facilitating peeling of the flexible film" appear to be vague, indefinite and inconsistent with the scope of curing disclosed in the specification, paragraph [0050], which only teaches that "The second adhesive layer may also be formed to be electromagnetic radiation-curable and adhere to the first mixture layer". Clarification is requested.

Additionally, in claims 5, 13 and 21, line 5 of each claim, the phrase "the electromagnetic radiation-curable components" is vague, indefinite and confusing. Since in newly amended claims 1, 9 and 17, both the first outermost and the second adhesive layers comprise electromagnetic radiation curable components, it is unclear which layer the aforementioned curable components is directed to. Clarifications are required. For this Office action, it is presumed that the phrase "the electromagnetic radiation-curable components" is directed to components in the first outermost adhesive layer.

Finally, the Examiner notes that, at the last two lines of claims 5, 13 and 21, the recitation "the second bond strength (or level of adhesiveness) being lower than the first

bond strength (or level of adhesiveness)" appears to be vague, indefinite and confusing, as it is unclear what is the standard and scope for the second bond strength (or level of adhesiveness) being greater than a "permanently attached" first bond strength.

Clarification is requested.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Weng et al. (US 5972234), substantially for the reasons set forth in section 9 of Paper No. 123103, together with the following additional observations.

It is noted that newly amended independent claims 1, 9 and 17 now recite, *inter alia*, that "a first outermost adhesive layer ... by curing and bonding to at least a portion of a semiconductor device ... the second adhesive layer comprising a mixture of electromagnetic radiation-curable components so that when exposed to radiation the second adhesive layer performs at least one of curing onto portions of the first outermost adhesive layer and losing adhesive properties for facilitating peeling of the flexible film material from at least a portion of a surface of a semiconductor device".

The Examiner repeats (see Paper No. 0926, pages 5-7) that Weng's invention is directed to a laser mark tape for marking an electronic substrate, and creating a mark

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through the tape by a high-intensity energy beam. In one embodiment, Weng teaches a marking the tape with an identification mark by a high-intensity energy beam (column 2, lines 20-21). Weng also teaches that when an adhesive-backed polymeric tape is used, an extra release layer, such as polypropylene or PET film, may be provided to cover the adhesive layer for protection during the laser marking process (column 4, line 64 to column 5, line 2).

For claims 1, 2, 7, 9, 10, 15, 17, 18 and 23, although Weng lacks an express teaching the laser mark tape is formed from an adhesive comprising radiation-curable components, it is noted that Weng does expressly teach that any suitable tape of polymeric based material, which can be easily patterned by high-intensity energy beams such as ultraviolet light or laser, can be used (column 4, lines 27-33). As such, Weng's laser mark tape clearly inherently reads on both the first outermost adhesive layer and the second adhesive layer of the instant invention. It should be noted that since both the first outermost adhesive layer and the second adhesive layer of the instant invention have the same composition (electromagnetic radiation-curable components), in the absence of any specific difference in composition, they are virtually on single layer, and also can be cured as one single layer. Claims lack novelty.

For claims 3, 11 and 19, Weng expressly teaches that the substrates includes a silicon wafer ... and any suitable electronic substrate materials that is utilized in the fabrication of electronic devices (column 4, lines 18-20), which clearly encompasses the instantly claimed grinding mark containing semiconductor die surface.

For claims 4-6, 12-14 and 20-22, the Examiner repeats (see Paper No. 0926, page 5) that these claims appear to be directed to the steps of use, and lack any additional structural element. As such, they are clearly improper and informal. The Examiner suggests that these claims should be re-written as process of use. Further, since Weng teaches essentially the same subject matter as the instant invention, as set forth above, it is believed the properties of adhesive layer(s) are also inherently disclosed by Weng. It should be noted that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. See MPEP § 2112.01.

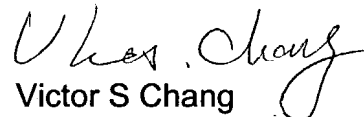
For claims 8, 16 and 24, the Examiner notes that Weng's polypropylene release layer is inherently translucent.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Victor S Chang
Examiner
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5/12/2004